ILLINOIS BUSINESS REVIEW

A MONTHLY SUMMARY OF BUSINESS CONDITIONS FOR ILLINOIS

THE UNIVERSITY OF CHICAGO LIBRARY
AUG 22 1955
PER B. E.

PUBLISHED BY . . . .
BUREAU OF ECONOMIC AND BUSINESS RESEARCH
COLLEGE OF COMMERCE · UNIVERSITY OF ILLINOIS

VOLUME XII | AUGUST, 1955 | NUMBER 8

HIGHLIGHTS OF BUSINESS IN JULY

Industrial activity remained high in July despite labor difficulties and vacations. The boom in passenger car output continued as manufacturers built up inventories to cover the changeover period. The steel industry operated at 90 percent of capacity or better; some plants were scheduling capacity production as demand held at peak levels. Soft coal output exceeded 9.7 million tons weekly at midmonth and electricity production continued to set new records.

Department store sales were running well ahead of 1954 in all districts. Early July weekly gains over corresponding weeks of last year amounted to 10 percent or more for the nation. For the year to mid-July, department store sales were 6 percent ahead of 1954.

Crop Estimates

Government agencies and others trying to solve the problem of surplus farm products will get no aid or comfort from this year's prospective harvests. The July 1 report of the Department of Agriculture indicates that 1955 will be the second highest production year on record. Despite a 5-percent cut from last year in acreages planted, output is expected to be about 4 percent greater. Less insect damage, better weather conditions, and higher per-acre yields account for the difference.

Higher production of corn, oats, barley, soybeans, and peanuts will more than offset lower output of wheat, cotton, tobacco, rice, and sugar. The corn crop is expected to be as much as one-sixth greater than last year's. Better weather has more than made up for an acreage cut of approximately one-eighth. Soybean acreage is the highest on record; but the wheat crop anticipated is somewhat smaller than that of 1954.

Profits at High Level

First quarter profits for American manufacturers reached the highest level for that period in four years. After-tax earnings of $3.3 billion were 9 percent above the fourth quarter of 1954 and 29 percent over earnings for the first three months of 1954. This high level of profits resulted from booming sales in nearly all lines of business. Total manufacturers' sales for the first quarter were estimated at $65.6 billion, up 2 percent from the previous three months and nearly 8 percent from the corresponding period of 1954.

Early reports of second quarter earnings indicate a continuation of this high-earnings trend. Gains over the second quarter of 1954 were widespread and frequently were very large, with profits reaching record levels in many cases. Advances over last year were particularly large for primary metals firms and for some auto companies.

Housing Starts Seasonally Lower

A slowdown in private building cut nonfarm housing starts from May to June. Despite the seasonal decline of 3,000 units to 129,000, however, the June level was still well above the corresponding month of 1954 and was the third highest June on record. The seasonally adjusted annual rate for the month was slightly over 1.3 million units, substantially less than last fall's rate of building.

In general, the homebuilding picture remains spotty. Some large cities are reporting fairly widespread cutbacks with builders finding financing somewhat tight and starting only enough new homes to keep their workers together. In other locales, residential construction continues at a high level and demand for new housing remains strong.

Another facet of the housing situation has been covered by the Department of Commerce in a recent report on vacancy rates which gives an over-all rate of 2.2 percent. A rate as high as 4 or 5 percent is not considered disturbing. Although the recent low figure may be encouraging to those who fear overbuilding, it balances shortages against surpluses, and therefore does not reflect housing needs in any single area.

Further declines in homebuilding are expected as a result of the joint action of the Federal Housing Administration and the Veterans Administration in tightening their mortgage terms at the end of July. Under the new rules, higher down payments will be required and mortgage periods will be shorter.

Because of the annual vacation of the University Print Shop this issue of the *Review* is reduced in size. It omits the usual statistical data, which are generally not yet available. We shall be glad to send copies of the missing tables to anyone requesting them. The next issue will contain the usual 12 pages.

JOBS, PRODUCTIVITY, AND FULL EMPLOYMENT · By Richard C. Wilcock · Page 6

ILLINOIS BUSINESS REVIEW

Published monthly by the

BUREAU OF ECONOMIC AND BUSINESS RESEARCH
UNIVERSITY OF ILLINOIS

The material appearing in the *Illinois Business Review* is derived from various primary sources and compiled by the Bureau of Economic and Business Research. Its chief purpose is to provide businessmen of the State and other interested persons with current information on business conditions. The *Review* will be sent free on request.

Entered as second-class matter February 5, 1944, at the post office at Urbana, Illinois, under the Act of August 24, 1912.

V LEWIS BASSIE, *Director* — RUTH A. BIRDZELL, *Editor of Publications*

ROBERT FERBER, *Research Associate Professor*

Research Assistants

DAVID J. BLOMBERG — PATRICIA P. WEBBER

DONALD C. STREEVER, JR.

House of Cards

The stock market is high!

This fact warns of a danger. Take heed, but don't think it tells the whole story. It is in itself no good reason for thinking either that the market can't go higher still or that a decline is imminent.

The situation is one in which both bulls and bears can find reasons for holding to their positions. The bulls can point to rising earnings and the absence of weak, speculative holdings on slender margins. The bears can draw analogies with 1929, describe "technical" weaknesses in the market, and cite the narrowing of the gap between dividends and interest yields on bonds. At the moment, the argument cannot be conclusively decided in favor of either; but in terms of what is happening, the bulls have the better of it, because the market keeps moving up.

Character of the Market

It must be conceded that signs of speculative fervor are missing from the current market. Borrowing, though rising sharply in the last year, is still low in relation to total values. Volume of trading is within the bounds of normal business. The excitement usually attributed to the uninformed public just isn't there. The public, by and large, has preferred to turn funds over to financial institutions, to let professionals do the investing. According to the Federal Reserve Survey of Consumer Finances only 8 percent of the families own common stocks.

The institutional investors, on the other hand, have shown less restraint than the public. They are wild about the future of high-grade investment issues, the so-called "blue chips." The rise in their favorite issues has been sufficient to discount future as well as present high earnings; dividend yields on many of those issues are now well under the yields on high-grade bonds. This kind of selective rise has typified the tops of earlier boom markets.

Other signs that the market may be topping out are not hard to find. Dividend yields have been declining steadily; the margin between stocks and high-grade bonds is low, and that between common stocks and high-grade preferred stocks has been wiped out. The proportion of common stocks in new issues has been rising; and it is even higher than the figures show, because convertible bonds depend for their market on the conversion feature and are, in effect, indirect stock issues. Furthermore, the credit position is deteriorating; not only are customers' debit balances on the increase but free credit balances have been declining since early 1955.

Like high prices themselves, however, all these market symptoms fail to provide a conclusive answer. If such an answer is to be found, it must be sought in the relation of the stock market to the state of the whole economy.

The professional investors are, of course, sophisticated enough to know that market prospects must be evaluated in relation to economic prospects. Corporate earnings have risen sharply in the recovery, partly because they are no longer restricted by the excess profits tax. The rise in stock prices, it may be argued, has on the whole been no more than enough to discount higher 1955 earnings. Perhaps this is true, but whether prices have more than discounted 1956 earnings remains the critical question. Many optimists give a favorable answer because they expect good business to continue through 1956, and even beyond.

Those who look for prosperity to go on indefinitely often cite the government's responsibility for economic stability as a reason for confidence. This, however, is a dubious argument in relation to stock prices. Nothing the government can do to support the economy in a decline will help to maintain stock prices in the early stages. But if the government should act to curb inflation while the boom is still going on, stock prices might be immediately depressed.

Mutually Supporting Instabilities

What seems clear is that the market has been able to get where it is only because of an atmosphere of all-embracing optimism. This optimism grows in part out of the facts of the boom, but it also feeds on the rise in stock prices. It is a typical state of mind at the end of a long prosperity. All the declines in those years of prosperity have been minor. Therefore, it seems that all future declines must be minor, too.

Given the boom, there is nothing wrong with the market. If activity and earnings hold up, there is no reason the market should decline. The professional investors point this out confidently. But nobody trusts the stability of the market. Many of this group, like the more forthright speculators, are expecting to get out before the break.

The trouble is that in a situation when everybody is trying to beat the gun, very few can succeed. All the rest merely drive prices down that much faster. The absence of margins, and of prospective margin calls, is no real protection against a future collapse of the price structure.

To feel secure, one must fall back on the realities of business prosperity. But, as we pointed out last month, the economic situation is unstable too. The boom is supporting the market, and the market is supporting the boom. The upward spiral of booming business, high earnings, high stock prices, easy spending, and unrestrained optimism builds on itself round by round, though none of these elements can be depended upon to sustain itself very long. All together, it resembles a house of cards, cleverly balanced for the time being, but ready to fall apart when any portion fails to hold up.

The prudent investor does not look for security in such a structure. When potential further gains are small in comparison with potential losses, he lightens his commitments. VLB

VITAMINS FOR HEALTH

The amount and kind of food a person eats influences his well-being. As a result of achievements in the science of nutrition in recent years, diet has become one of the few determining factors in our destiny over which we have a large degree of control.

Our daily diet consists of five types of substances: proteins, carbohydrates, fats, minerals, and vitamins. Vitamins are needed in order to control the body's use of the other four substances and to protect it from disease. Accordingly, they may be described as "small quantities of substances essential to life."

Discovery

Our knowledge of vitamins is comparatively recent, but the compounds now known as vitamins exerted their effects long before the discovery of their existence. Various deficiency diseases, such as beri-beri, scurvy, rickets, night blindness, and pellagra, have plagued the human race for centuries, but not until the eighteenth century was any progress made toward their cure.

In 1720, Dr. Kramer, an Austrian army physician, recognized that scurvy — the curse of long sea voyages — could be cured by three or four ounces of orange or lime juice. In 1757, Dr. James Lind published a book on scurvy in which he emphasized the value of fresh fruit in the treatment of the dreaded disease. By 1804, all British naval vessels included lemons — erroneously called limes — in their daily rations, with the result that British sailors became known as "limeys."

The first laboratory proof of the existence of vitamins was not provided until after the beginning of the nineteenth century. Through clinical experiments it was observed that certain diets produced certain diseases and that it was possible to cure these diseases by controlling the diets. In 1911, a Polish chemist, Casimir Funk, referred to beri-beri, scurvy, rickets, and pellagra as "vitamine" deficiencies. While the attributes of an "amine" — a group of chemical compounds from which vitamin derived its name — were not common to all substances of this type, he thus coined a new word and created a label for a new department of knowledge.

As new substances were discovered they were given letter designations and become known simply as vitamins A, B, C, D, E, and so forth. Later, many of these substances were found to contain more than one related crystalline substance, and as a result, letters with subscripts such as B_1, B_2, and B_{12}, were adopted. However, the current trend is to refer to a new vitamin by its chemical name only. New methods of isolating food ingredients have increased the list of vitamins known to medical science to where it currently includes more than 40 essentials for proper diet.

The Industry

Today, the large-scale manufacture of vitamins is one of the important contributions of the drug and pharmaceutical industry. In 1954 the retail value of vitamin concentrates was $235 million as compared with $90 million in 1940. Of this amount, drug store sales accounted for 79 percent. Next in rank, percentagewise, were hospitals with 6.5 percent, followed closely by house-to-house vendors with 5.7 percent. Department stores, grocery stores, mail order houses, and other miscellaneous outlets accounted for all other sales.

Illinois is listed as the fourth ranking state in the nation in the production of vitamins. More than 100 firms are locally engaged in the manufacture or distribution of vitamin products, with approximately 10,000 workers employed in the industry.

The Abbott Laboratories in North Chicago ranks as one of the leading domestic producers of pharmaceuticals, medical chemicals, biologicals, and vitamin products. Vitamins, Incorporated, with headquarters in Chicago, operates nine warehouses and processing plants, produces 50 percent of the natural vitamin A concentrate in the United States, and is the largest producer of vitamin D. In addition, Dawe's Vitamins, Incorporated, Kraft Chemical Company, and Vi-Co Products Company of Chicago, Douglas Chemical Corporation of Evanston, and Lincoln Laboratories Incorporated of Decatur — to name but a few — are also engaged in the manufacture of vitamins.

Research

During the 1930's vitamins became a fad. It was implied that extra vitamins could keep hair from turning gray, cure tuberculosis and alcoholism, brighten eyes, quiet nerves, and strengthen teeth. In the reaction from the first wave of enthusiasm it was pointed out that extra vitamins were good only in the cure and prevention of "deficiency" diseases and that uncontrolled use could be harmful. Today, however, experiments with increased dosages have confirmed some of the earlier claims.

Recently, the lengthening of the average lifespan has shifted the emphasis in vitamin research to older people. In 1954 there were 20 million people over 60 in this country, an increase of 42 percent over 1940. Indications are that vitamins are among the major reasons for this increase. It has been proved that an added intake of certain vitamins has increased the lifespan of laboratory animals, but there is no immediate way of proving it clinically with people. It may take as long as a hundred years to get statistical data from insurance records to verify this point.

One may obtain all the nutrients he needs from an adequately varied diet, but nutritionists will admit that very few people in the United States — let alone the rest of the world — consistently maintain diets that are adequate in all respects. In the presence of such conditions it may be worth while for some people to take multivitamin capsules daily. In many instances vitamins have proved beneficial in addition to a well-balanced diet and many mental and nervous disorders have been successfully treated with B-complex vitamins, but scientists are still too engrossed in clinical and laboratory studies of the nutritional aspects of vitamins to answer positively one way or another.

RECENT ECONOMIC CHANGES

Retail Business High

Buoyed up by rising personal incomes, a substantial increase in the use of credit, and optimistic attitudes on the part of consumers, retail sales have surged ahead this year to new record levels. In June, sales totaled $15.6 billion, the same as in May after seasonal adjustment, but 6 percent above June, 1955.

Sales for the first six months of 1955 were 7½ percent above the first half of 1954. As illustrated by the chart, sales of all major retail store types were higher in the first half of this year than last. However, the advance in total sales in 1955 has been dominated by record-level sales of automobiles which accounted for more than a fifth of total retail sales in the first half of 1955. As the chart shows, automobile dealers represented the only major category of retailers for which the increase in sales was substantially greater than the increase in total sales.

Some of the groups with the larger increases in sales this year are those whose sales were off relatively most between the first halves of 1953 and 1954. The largest declines for that period were in the lumber-building-hardware group and in the automotive group. Declines also occurred in the apparel, general merchandise, and furniture and appliance groups a year ago. On the other hand sales of retail service stations led the list in gains for the 1953-54 period with an advance of 8 percent, the same as this year.

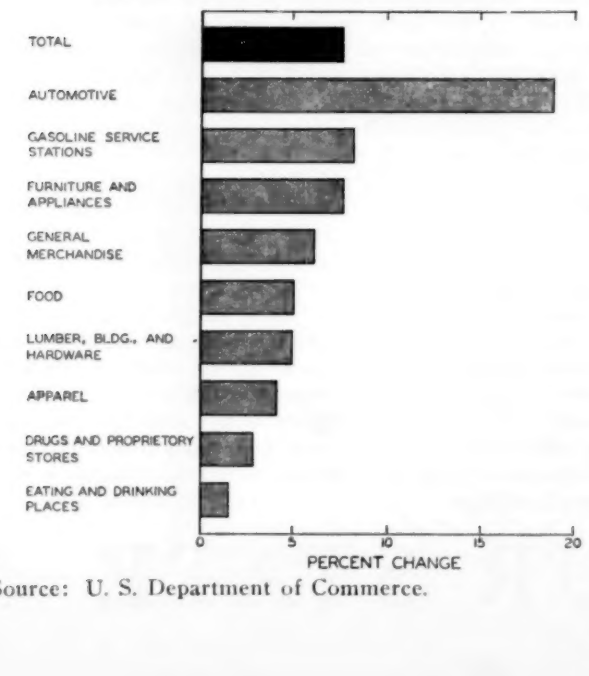
Federal Income, Outgo

The Federal government closed its books for fiscal year 1955 with a budget deficit of $4.2 billion. Revenue for the year ended June 30 amounted to $60.3 billion and expenditures to $64.5 billion. Both receipts and expenditures were down from fiscal year 1954 — by 7 and 5 percent respectively — but because of the larger cutback in receipts, fiscal 1955's budget deficit was about $1 billion higher than in fiscal year 1954. Nevertheless it was well below the deficit of $9.4 billion run up in fiscal year 1953 when expenditures were $10 billion above 1955 and receipts only $4.5 billion higher.

The reduction in the Federal government's income between fiscal years 1954 and 1955 was to a large extent a reflection of the $7.4-billion tax reduction program and lower corporate profits. Almost all of the main classifications of receipts were somewhat lower last year than the year before, with the most significant declines in corporate income taxes, which declined 15.1 percent to $18.3 billion, and in individual income taxes, which were down by 2.3 percent to $31.6 billion.

For the fiscal year to end next June, receipts are estimated at $60 billion and expenditures at $62.4 billion. If these estimates are borne out in fact, the anticipated deficit for fiscal year 1956 of $2.4 billion will be the lowest since fiscal 1951 when the government ended the year with one of its few postwar budget surpluses.

RETAIL SALES
Percent Change, 1st Half, 1954 to 1955



Source: U. S. Department of Commerce.

Liquid Saving Rate Down

Individuals put $1.7 billion into various forms of liquid saving during the first quarter of 1955, the lowest first quarter volume since 1951. The increase in liquid saving compares with additions of $2.8 billion in the first quarter of last year and $1.9 billion the year before. The lower rate of saving early in 1955 primarily reflects substantial growth in individuals' debt, which amounts to negative saving and offsets increases in liquid asset holdings. During the first quarter, individuals went $2.7 billion further into debt on their mortgage accounts, compared with $1.4 billion a year ago. Other debt, consisting largely of installment loans, changed only slightly in the first quarter, compared with a cut of $1.4 billion in such debt last year.

Other changes in the composition of liquid saving between the fourth quarter of 1954 and first quarter of this year were generally moderate. Because of the shift from March to April in the due date of income tax payments, currency and bank deposits declined by only $700 million, compared with $2.2 billion last year. However, individuals purchased a half billion dollars more of United States government securities in the first quarter of 1955 than last year. Most other types of liquid saving were about the same as a year ago.

Working Capital Continues Upward

Corporations added $2.3 billion to their net working capital in the first quarter of 1955, more than in any quarter since 1950. The advance resulted from a $1.7-billion decline in current liabilities and a $600-million increase in current assets.

The improvement in net working capital was mainly seasonal since the largest change in any of the balance sheet items was a $2.2-billion drop from the fourth quarter in Federal income tax liabilities, reflecting the larger payment of last year's tax in the first quarter. At the end of March corporate tax liabilities amounted to $13.4 billion compared with $15.3 billion a year earlier. Other current liabilities were only fractionally higher than at the end of 1954.

The main factors in the increase in assets were a rise in accounts receivable and a slight accumulation of inventories. These advances were partly offset by a reduction in corporate cash holdings, resulting from the tax payment mentioned above and moderate liquidation of government security holdings.

BUSINESS BRIEFS

PUBLICATIONS AND DEVELOPMENTS OF BUSINESS INTEREST

Suburbanization

Almost half of the construction activity in 1954 was located in the suburban areas of large cities. Only in the South did a greater volume of building take place in the cities than in the suburbs.

VALUATION OF BUILDING PERMITS, 1954

Area	Metropolitan areas		Nonmetropolitan areas
	Central cities	Suburbs	
Total	31	49	20
Northeast	28	62	10
North Central	29	52	19
South	40	31	29
West	27	51	22

Source: U. S. Departments of Commerce and Labor, *Construction Review*, April, 1955.

The residential building was most concentrated, with 57 percent in the suburbs. Surprisingly enough, more than half of the money invested in new factories was also spent in these outlying districts of the industrial centers. To keep up with these trends, spending on mercantile and utility facilities was also greatest in these areas.

Only in office buildings, amusement buildings, and community buildings such as schools and churches did the cities themselves rank highest. The nonmetropolitan areas boasted gasoline service stations as their only first.

State and Local Public Works

Recently released by the United States Department of Commerce were the results of a survey of construction plans of the large state and local governments in the nation. In all, 4,068 government units were covered, including states, large counties, municipalities, school districts, and special districts. In 1953 these accounted for more than 80 percent of the construction expenditures, so presumably they also account for the major part of future plans.

A total of 71,639 separate projects have been planned, involving the expenditure of almost $28 billion. Only about 8 percent of these are "ready to go," that is, they could be undertaken in a matter of weeks. Another third could be ready within six months, whereas the great majority could not be made ready for a year or more.

More than half of the projects and 45 percent of the expenditure are planned by municipalities and townships. Almost one-third of the governments surveyed, however, were planning no construction at the time of the study. All of the state governments had projects under way, accounting for another 37 percent of the expenditure, although for many fewer projects.

Highways were the object of the most plans, involving 30,851 separate projects and $10.8 billion. Educational facilities, the next largest group, amounted to only one-third as much.

Gardener's Delights

With the "Hydromix" a gardener can fertilize soil, kill weeds, and control bugs while he waters the lawn or garden. The device, developed by the Doggett-Preil Company of Springfield, New Jersey, attaches to the wall faucet and allows soluble chemicals to flow directly into the hose. Controls permit only the desired amount of each chemical per gallon of water to be dissolved and it automatically adjusts itself to varying water pressure.

Once-a-year fertilizer is a new product of E. I. duPont de Nemours and Company. It is a mixture of methylene ureas that will dissolve slowly, releasing nitrogen into the soil gradually over a period of several months. The fertilizer is called Uramite, and the cost is about the same as for other nitrogen fertilizers.

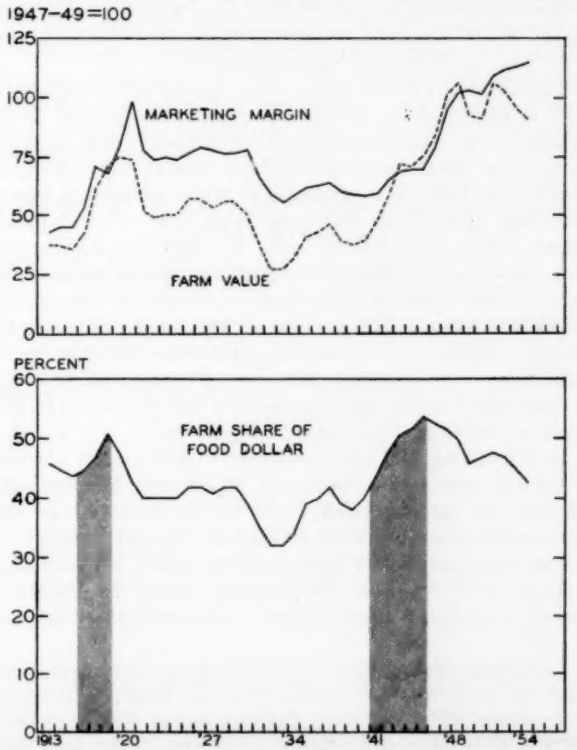
Farm-Retail Price Spreads

Since 1945 the farmer's share of the retail food dollar has declined by 11 cents, from 54 percent in that year to 43 percent in 1954. Actual prices, on the other hand, remain well above those at the close of World War II. The difference results from the relation of movements in farm prices and marketing charges, as may be seen in the following chart.

Since 1913 there have been only three periods when farm prices have risen faster than marketing charges, causing a rise in the farmer's proportion of the consumer's food dollar. Two of these periods were war booms; the third comprised the years following 1933 when the nation was fighting its way out of the depression.

In the early 1920's the war-induced boom was reversed and there was a decline in the farm share. Similarly, we are now in a period of decline as we return to a peacetime economy. Noteworthy in this recent decline is the slight reversal of major trend caused by the Korean upset. Except for this the farmer's share has progressed steadily toward the 40 percent prevailing during the "more normal" 1920's and late 1930's.

FOOD PRICES AND THE FARMER'S SHARE



Source: U. S. Department of Agriculture.

JOBS, PRODUCTIVITY, AND FULL EMPLOYMENT

RICHARD C. WILCOCK

Institute of Labor and Industrial Relations, University of Illinois

"Well, in *our* country," said Alice, still panting a little, "you'd generally get to somewhere else — if you ran very fast for a long time as we've been doing."

"A slow sort of country!" said the Queen. "Now, *here*, you see, it takes all the running *you* can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!" *Through the Looking-Glass*

Productivity creates a paradox like that in the Lewis Carroll classic. As productivity increases — meaning that for each worker there is *more* output in an hour's time on the job — the economy must "run" faster and faster to keep unemployment in the same place. In fact, output must increase more than twice as fast as the number of jobs.[1]

The ever-growing productivity of United States factories and farms is one of the wonders of the world and it has meant material progress and high standards of living. But productivity by itself does not create prosperity or produce "full employment." As a matter of fact, as productivity rises, it can and does destroy jobs and displace workers. If the displaced workers are not to swell the ranks of the unemployed, the key question then becomes: "Will the *total number* of jobs in the economy expand to match the growth in the nation's population and labor force?

The economy does, of course, create new jobs with the introduction and development of new products and industries. What is often not fully realized, however, is that in the process of job turnover (new jobs for obsolete jobs) there may be significant *lags*. The data indicate, in fact, that the more rapid and forceful the change the greater the employment lag is likely to be. In the past few years, productivity has apparently been increasing at an above-normal pace. In the last year alone, productivity jumped 6 or 7 percent, according to some estimates, compared with a "normal" 2 or 3 percent.

The charts clearly show why productivity advances make it essential for output to expand constantly if the economy is to stay on an even keel. Chart 1, for example, shows the previously unmatched peaks of production achieved in 1953. The Federal Reserve Board's index of industrial production for that year rose to a high 37 percent above the 1947-49 level. In 1953 there were also more jobs than in 1947-49 — about 15 percent more at the peak. In fact, there were enough new jobs so that unemployment was only 2½ percent of the labor force, on the average. Since 2½ percent is generally thought to be about as low as unemployment can average and still permit workers time to move from one job to another, 1953 can be called a year of "full employment."

In the spring and early summer of 1955, total national output has been rising above the 1953 levels. Employment, however, is lagging behind the levels achieved in that year (with relatively little change in hours of work), so that unemployment has been running above the minimum levels of 1953. In June, for example, when the industrial production index hit an all-time peak, unemployment was 4 percent of the civilian labor force. In June, 1953, it was only 2.4 percent. Why this lag in employment and unemployment?

Productivity-Full Employment Relationship

The number of jobs required to equal "full employment" depends primarily upon the changes in two variables which have been steadily increasing in size — productivity and population. Since in the last few years the labor force has remained at approximately 57 or 58 percent of the adult population, each increase in population has meant an increase in the size of the labor force. Under these circumstances, about 600,000 additional jobs must be created each year to maintain existing levels of unemployment.

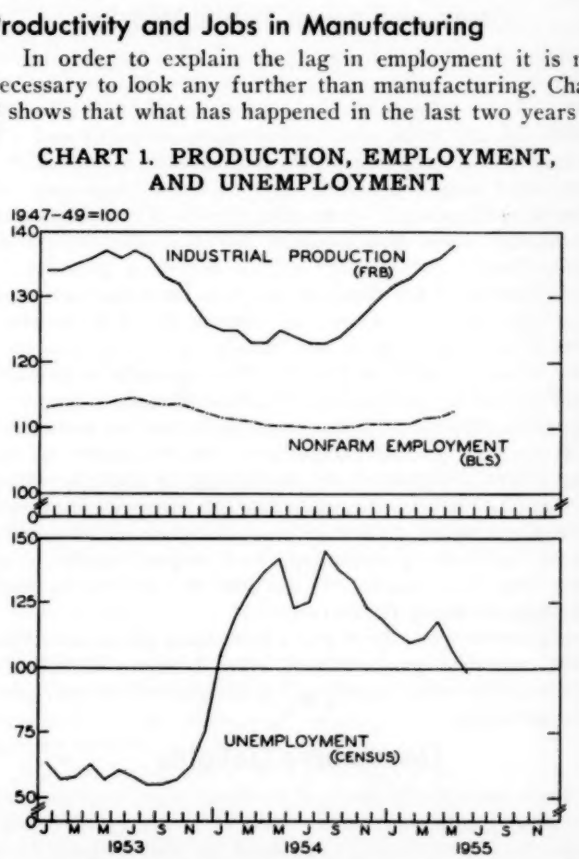
In addition, it is necessary to replace those jobs which disappear as the result of technological change and automation. To create new and replacement jobs, the only answer is a greater total output, and as a matter of fact, an accelerated increase in national output. This would be less true if the hours of work fell off as productivity increased. The factors which contribute to high productivity, however, are just as apt to increase the average number of hours worked as to decrease them.

Thus far in 1955, national output, while setting new records, has not accelerated sufficiently to provide the number of jobs necessary to reduce unemployment to 1953 levels.

Productivity and Jobs in Manufacturing

In order to explain the lag in employment it is not necessary to look any further than manufacturing. Chart 2 shows that what has happened in the last two years in

CHART 1. PRODUCTION, EMPLOYMENT, AND UNEMPLOYMENT



Sources: Federal Reserve Board; Bureau of Labor Statistics; and Bureau of the Census.

[1] Alternatively, everyone could work fewer and fewer hours. A general and continuous reduction in the length of the work week, geared to productivity changes, seems highly unlikely, however, although over a long period of time productivity gains can be and are enjoyed in part in the form of shorter hours.

manufacturing tells much of the story of the productivity-employment-unemployment relationship. The data on Chart 2 have been shown on a first-half-of-1953 base in order to show clearly how output accelerates much more rapidly than employment during an upswing. (On the 1947-49 base, production would be about one-third higher than employment for the most recent data on the chart.)

Durable goods output fell in late 1953 and during much of 1954. Most important in this decline were ordnance (reflecting a decrease in government purchases), farm equipment (reflecting the decline in farm income), transportation equipment (both automotive and freight car manufacturing fell off) and primary metals (the suppliers of steel and other metals to the fabricating industries). Since the summer of 1954, however, durable goods manufacturing has again been on the upgrade. Moreover, the stimulus is coming from consumers and not from government. "Military hardware" remains well below 1953 levels, whereas passenger automobiles and building materials are running above the 1953 levels; machine tool output, although below 1953 levels, is increasing; the production of appliances is equal to the 1953 level.

In autos, home construction, business inventories — indeed, in most goods and services — the United States is having a boom year and perhaps the greatest consumer-inspired boom in its history. One of the key signals of boom times has appeared — more workers are quitting than are being laid off. This means that workers are confident that they can better themselves by voluntarily changing jobs and that employers generally are reluctant to lay off workers and indeed are trying to keep those they have. Yet at the same time, there remains the seeming paradox that unemployment levels are considerably higher than in previous postwar boom periods.

In May, 1955, the seasonally adjusted index of manufacturing output was a point higher than in May, 1953. Manufacturing employment, however, was over 700,000 below that of May, 1953. Thus, while total manufacturing output was approximately the same, the process of destroying and creating jobs had left a substantial deficit.

In this net loss of jobs, 600,000 were in durable goods manufacturing. As of May, 1955, therefore, while durable goods output was almost up to the level of two years before, increases in productivity had resulted in a substantial decrease in the number of jobs.

The effect of increases in productivity on the number of jobs is just as apparent in the so-called soft goods industries of manufacturing. Output in these industries was, in the spring of 1955, *well above* the 1953 level; yet employment in May, 1955, was still more than 100,000 below the May, 1953, level. The increase in nondurable goods output represents higher spending by consumers and, therefore, higher per capita real income and standard of living. Increases in productivity — which made possible the higher incomes — also created the drop in employment.

Summary and Conclusion

Sufficient data are not as yet available to provide a completely satisfactory interpretation of why, in the midst of a great boom, unemployment has stayed well above the minimum levels achieved in previous years. Analysis of the available data, however, suggests several reasons for this paradoxical situation. In the first place, the very rapidity of the changes taking place creates an employment lag. For various reasons many industries can often increase their output substantially with relatively little immediate increase in employment. Output is increased initially without any increase in "overhead" personnel; hours of work are increased; and productivity takes a sudden spurt (particularly if there has been any "fat" in the payroll).

Secondly — and perhaps more important — shifts in the "product mix" of industry are apt to occur more rapidly in a period of dynamic growth. These shifts in product demands create shifts in the derived demand for labor. Labor demand changes in specific occupations, industries, and locations. One result is localized pools of unemployment, which account for much of the current unemployment total.

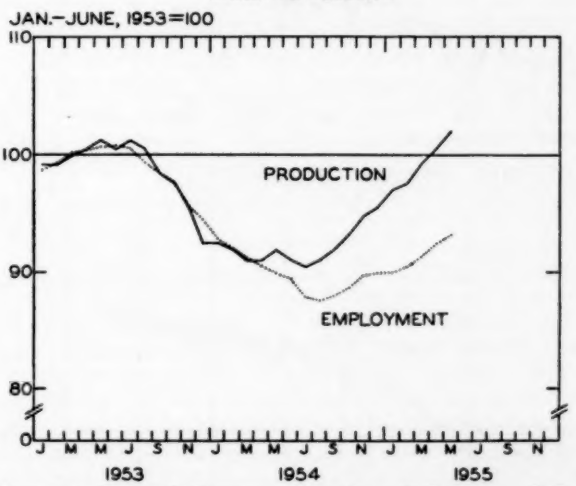
The textile and coal industries provide a case in point. Demand for textile products and coal, in contrast to other products, has declined, while output per man-hour has increased. The combination of these two factors has led to substantial unemployment in textile and coal-mining communities. This unemployment has also tended to persist — even while labor has been in "short" supply elsewhere — because the necessary adjustments, such as movement of new industries into the depressed communities, retraining of workers in new occupations and skills, and migration of workers to areas with more abundant employment opportunities, are slow to take place.

Finally, in a period of rapid technological change, jobs can be destroyed more rapidly than they can be replaced by the demand for new products and by the requirements of new techniques of production. In the past year real income and consumer spending have increased, but the increase has not as yet been large enough to create a "full employment" level under which unemployment would fall to 2 or 2½ percent of the labor force.

Thus, in addition to the lag in hiring (on the part of employers) and the lag in movement between occupations and localities (on the part of workers), there is this third and most important lag — the lag in spending and output necessary to provide the number of jobs called for in a "full employment" economy.

These seem only to be *lags* and not permanent *gaps* between output and employment. If technological change and automation continue to move as rapidly as in the recent past, however, higher rates of unemployment may continue even during "prosperity," as people become isolated in those towns, industries, or occupations with declining employment opportunities.

CHART 2. MANUFACTURING OUTPUT AND EMPLOYMENT



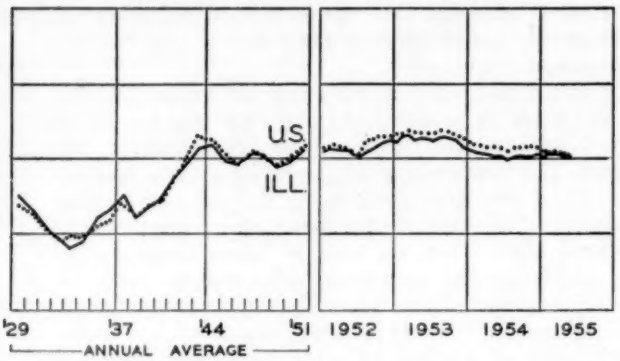
Sources: Federal Reserve Board and Bureau of Labor Statistics.

The University of Chicago Libraries
Periodical Division, Harper, M22
Chicago 37, Ill.

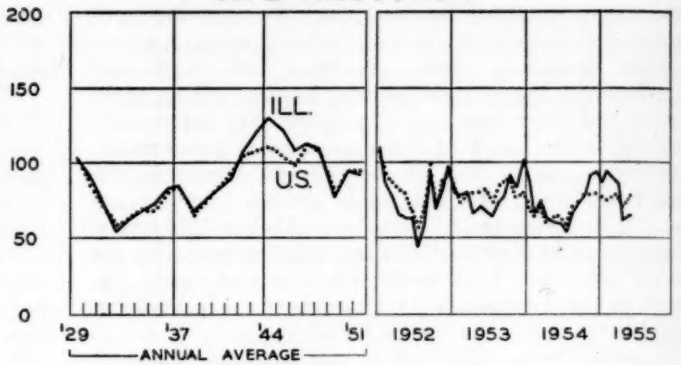
INDEXES OF BUSINESS ACTIVITY

1947-1949 = 100

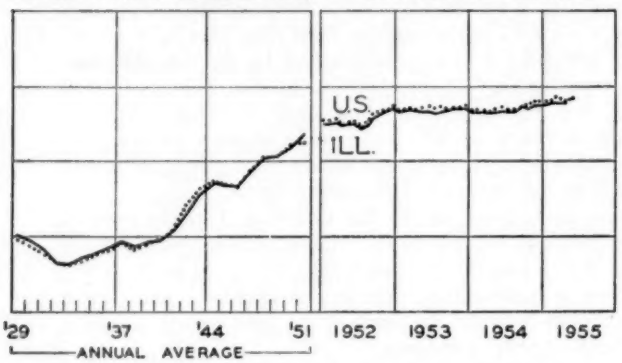
EMPLOYMENT - MANUFACTURING



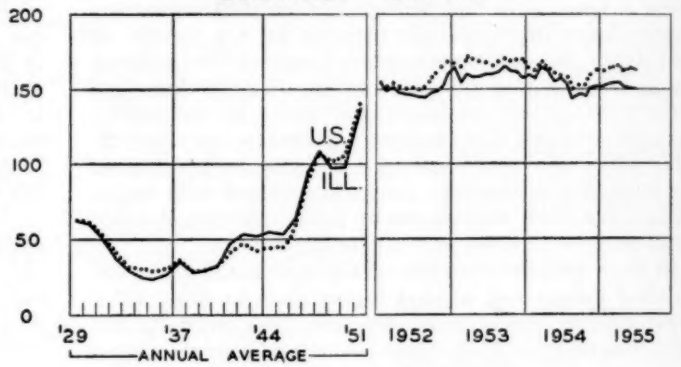
COAL PRODUCTION



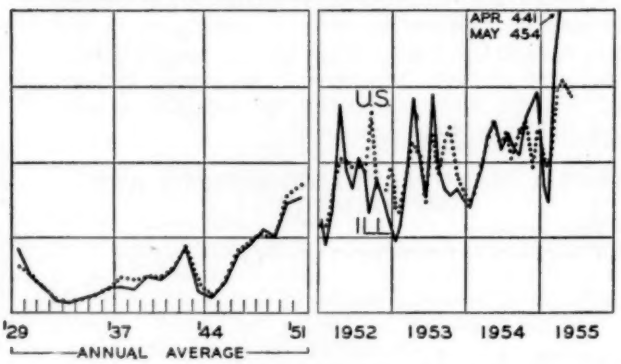
AVG. WKLY. EARNINGS — MANUFACTURING



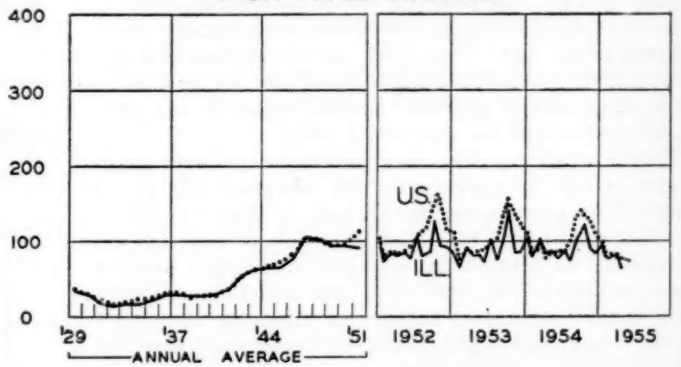
BUSINESS LOANS



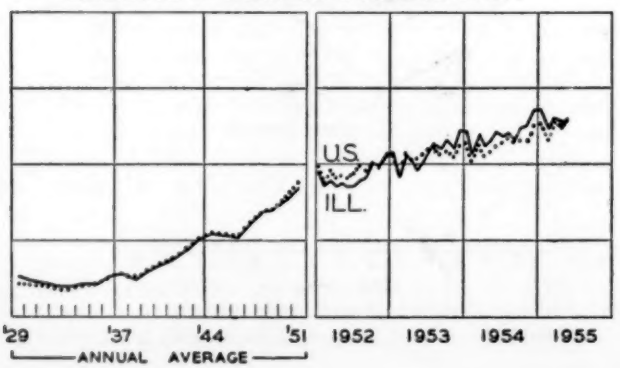
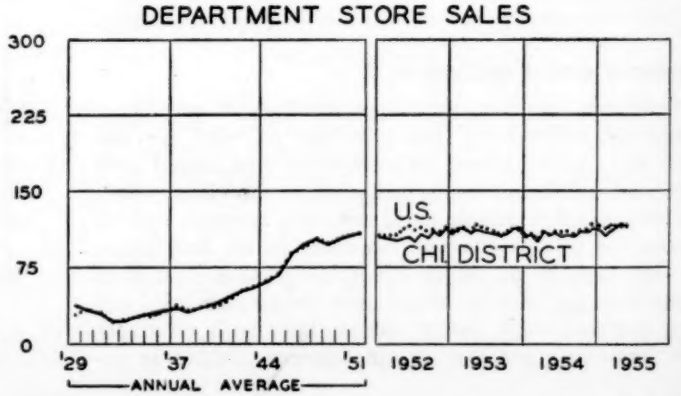
CONSTRUCTION CONTRACTS AWARDED



CASH FARM INCOME



ELECTRIC POWER PRODUCTION



DEPARTMENT STORE SALES